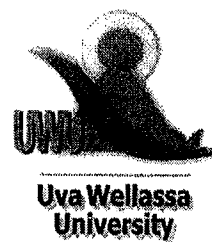


Uva Wellassa University of Sri Lanka  
Faculty of Animal Science & Export Agriculture



Animal Science Degree Programme  
Year III Semester II  
End Semester Examination- August/ September 2014

ANS 332-3 Animal Biotechnology  
Essay (Section III)

**Instructions**

Answer all questions in Section III in the booklet provided

No. of questions : Three (03)

No. of pages : One (01)

Time : One hour and thirty minutes (01 hr. 30 min.)

Total marks allocated : 60%

1.

a) Propose a method to transfer **Human Insulin gene** into **bacteria** to meet the high insulin demand of diabetic patens. Outline the steps involved in gene transformation.

(50 marks)

b) Write a **brief summary** on 'Uses and Applications of Transgenic Animals'.

(50 marks)

2.

a) Lac Z gene is an essential gene for bacterial survival, but you can use it as a marker gene. State how you can use this **Lac Z gene as a marker gene**

(50 marks)

a) Briefly explain the **cloning technique** used to produce clone, **Dolly** the sheep

(50 marks)

3. Write short notes on,

a) Variable Number Tandem Repeats (VNTRs)

b) Construction of cDNA library

c) Restriction enzymes

(100 marks)

[End of Section III]